

many such have passed through our hands. The compiler has gone the right way to work in the production of this compendium. He has taken everything he required from the best of previous authorities, as he frankly admits; and, thus standing on the labours of previous compilers, he could not but well accomplish his end of extracting the quintessence of each, and, with industry and intense condensation, combining the results of their labours into one focus,—at a sacrifice of many of the excellencies of each assembled, but with an immense accumulation of their varied stores. Most especially of all we can perceive that this author has made good use of the idea first embodied in the Parliamentary Gazetteer of England and Wales, published by Pullar, too, of ransacking all sorts of Parliamentary blue books for valuable statistics of every kind connected with the localities described; and the dissection of the ordnance surveys may be regarded as a suggestion based on the same idea: indeed, the author acknowledges his obligations to the work in question in a general way, as well as to Lewis, Chambers, Carlisle, and other "general writers," as "the best authorities." He has also made good use of the multitude of special guide-books. In thus acknowledging the general merits of this work, however, we take it for granted that the author has carried his plan throughout quite up to the mark of the portion which is now before us.

Painters, Grainers, and Writers' Assistant.
By E. BARBER, Patentee of the Granite and Graining Machine. Elliott, New Oxford-street. 1852.

THIS brochure consists of a number of receipts and instructions for mixing various colours, imitating woods, &c. A correspondent from Jersey asks us to give him "the ingredients (and the proportion in which they are to be mixed) for tinting ceilings of a clear and delicate French grey." The book we are mentioning says of the colour in question,—"Whiting predominates in this colour; it is treated as the other greys, but with this difference, that it admits of lake instead of black. Take the quantity of whiting necessary, and soak it in water; then add Prussian blue and lake which has been finely ground in water. The quantity of each colour should, of course, be proportioned to the warmth of colour required." A superior colour, we think, could be made from French ultra marine, and a very small quantity of Indian red. If lake be used, a little yellow would be useful.

SERIALS.

The Journal of Design (Chapman and Hall), is brought to a close with the present number, which completes the 6th volume of its useful career. It contains many valuable essays on the principles of design, and will continue to be a book of reference. A writer in the present number bears testimony to the value of the drawing classes at the London Mechanics' Institution.

The Journal of Physical Regeneration (Gilpin.) No. 1. This purports to be "a monthly epitome of public health." Sanitary measures on the part of its conductors will be needed if long life be desired. The present part is weakly in constitution.

Curiosities of Industry. (C. Knight.) The fifth part of Mr. Geo. Dodd's very interesting work treats of the modern varieties of printing, and a contrast between cotton and flax *apropos* of the Claussen process. The writer gives the following description of Messrs. Marshall's flax mill at Leeds:—

"Instead of having several stories, tiers, or floors, one above another, as is usually the case, the whole is here thrown upon one floor—to insure convenience of supervision, facility of access, uniform temperature, good ventilation, and simplicity of machine arrangements. This monster room is nearly 400 feet long, by more than 200 broad: it is five times as large as Westminster Hall; and, until the Crystal Palace was built, this Leeds room was deemed the largest (or nearly so) in the world. The room has a vaulted ceiling, formed of about twenty domes, having skylights at their upper extremities, and being supported by iron pillars. These pillars, as at the Crystal Palace, serve also as

water-pipes, to convey the drainage from the roof. The roof, presenting an area of nearly two acres, was a few years ago covered with mould and grass, so that one could literally take a walk in a green field on the roof of a factory: whether this arrangement is still maintained, we are not aware. The interior of the room is filled with beautiful machinery, for performing all the various operations on flax; and beneath are vaulted passages, which contain all the arrangements for supplying steam power, warmth, and ventilation to the hive of busy operatives working above. It is certainly a triumph of engineering and mechanical skill, when such a building is filled with the finest machines which modern ingenuity can produce. How much mind, how much capital, how much labour must have been thrown into such an assemblage! How do we here trace the accumulation of many years' experience—the bringing to bear upon one object of so many distinct agencies and sources of power, mental and material, social and commercial!"

Cyclopædia of Useful Arts. (George Virtue.) Part VI. brings us up to "Candle,"—a good omeo for the light that is to be thrown on all things and ways by Mr. Tomlinson. The article "Bridge" contains a full exposition of the Britannia Tubes.

MISCELLANEA.

BUILDERS' BENEVOLENT INSTITUTION.

—The annual ball of the above useful charity, to be held at Willis's Rooms, St. James's, on Thursday, the 19th inst., under the patronage of the president, Mr. Thomas Grisell, F.S.A., Lord Dudley Stuart, M.P., Sir Benjamin Hall, Bart. M.P., Mr. Alderman W. Cubitt, M.P., and other influential gentlemen, promises to be on a scale of completeness that cannot but ensure approval. We trust the public will not be slow to patronise this valuable and deserving charity which has afforded relief to many decayed members of the trade, and to encourage the officers of it in their endeavours to extend its benefits. We have also the gratification of announcing that another election of pensioners will take place in the month of May next; and that the directors have recently made a bye-law empowering them to appoint distinct committees in the provinces, thus extending the benefits of the institution to all parts of the kingdom.

RUGBY WATER-SUPPLY AND DRAINAGE.
—On Saturday week the new works of water-supply and drainage under the Public Health Act, for the sanitary improvement of the town of Rugby, were inspected by the Commissioners of the General Board of Health. The Earl of Shaftesbury, Mr. Chadwick, and Dr. Southwood Smith, attended by some officers of the General Board, visited the works. The most conspicuous of these is a high water-tower, containing a tank to supply the town during Sunday, or in case of fire, or in the night, and to give pressure in the distribution of the water, and avoid the necessity for continuous pumping. The next work inspected was an under-ground reservoir, covered with groined arches. A portion, yet unclosed, of the cuttings of drains for the collection of the water was then visited. Deep drains have been cut into gravel, and the water may be drawn off at will, as from a reservoir, for the supply of the town. The property of the water, in respect of hardness, was said to be equal to eight degrees, while that of the existing town wells varies from sixteen to twenty and even thirty degrees, and that of the streams in the neighbourhood is generally of eighteen degrees. The length of main collecting pipe now laid is 2½ miles. The drainage works were afterwards inspected. The sewers are of impermeable stoneware tubes. In several cottages the cesspools had been filled up, and a water-closet apparatus substituted. The water service-pipes are of tin. The average expense of improvements for each cottage, it is estimated, might be repaid in the shape of a private improvement rate of about ½d. a week.

ACCIDENT TO A RAILWAY VIADUCT.—On Friday week part of the trussings at the railway viaduct, Hoo Brook, Kidderminster, was blown down. The damage extends over about five of the abutments, which being placed 51 feet apart, makes a total of between 80 and 90 yards.

BIRMINGHAM NEW WORKHOUSE.—In our article under this head, last week, we stated that by private subscription of the guardians, the officers of the workhouse, and the contractors, three stained glass windows had been placed in the chancel and aisle of the chapel. We are asked to say, however, that the subscriptions were by no means limited to the officers of the workhouse, four only of whom,—namely, the late master and his clerk, the matron, and surgeon contributed; whereas, among the officers generally who subscribed, and some of them rather largely, to the fund, were, the clerk to the board of guardians, the treasurer, the district auditor, the six district medical officers, the several officers of the infant poor asylum, the four relieving officers, the out-relief pay-clerk, the levy clerk, assistant overseers, and collectors, four in number, and other officers, none of whom come under the denomination of "officers of the workhouse," and to whose willing and liberal aid in promoting the object in question it is only an act of justice to record the fact we now place before our readers.

LIVERPOOL ARCHITECTURAL SOCIETY.—The usual fortnightly meeting of this society was held on Wednesday, 25th ult., Mr. Picton in the chair. Mr. F. Howard exhibited five drawings of castelabars, which he had executed for the Goldsmiths' Company in London. These designs were each adapted to a particular cost, the highest of which was calculated at 3,000*l.*, and the principal subject of which was Richard II. granting the charter of incorporation.—The Ventilation of St. George's Hall was explained by Mr. McKenzie, who exhibited, by a drawing, the whole machinery by which that extensive building is supplied with cold and hot air. The chairman said that the working of the whole affair would be very expensive. A discussion followed, in the course of which it was stated by Mr. McKenzie that it required a week to get up the proper temperature.

STATISTICS OF STRIKES.—In 1836, the operatives of Preston, to the number of 8,000, struck work for thirteen weeks, and the loss, in a mere monetary point of view, to the town and trade of Preston was calculated at no less a sum than 107,196*l.*, whilst from twenty to thirty thousand individuals were reduced at once to a state of starvation. In the same year the cotton-spinners of Glasgow struck for a period of seventeen weeks. The total loss to Glasgow amounted to 194,550*l.* In 1834, the result of the combination of colliers in Lanarkshire and the two adjoining counties, was equivalent to a tax on the inhabitants of 489,000*l.* for a period of eighteen months, besides a loss to the colliers themselves, their employers, and others, during a strike of six months, of 189,000*l.* In this strike it is also calculated that between forty and fifty thousand human beings were rendered destitute.—*Liverpool Mercury*.

PROVINCIAL SCHOOLS OF DESIGN.—On Monday week a general meeting of subscribers to the Norwich School of Design was held, when it was resolved to appoint a new working committee, five to be a quorum, and the three who had attended the least number of times to go out at the end of the year and not be re-eligible. The school now comprises 83 students, and is on the increase.—A movement has begun amongst the operatives at Wolverhampton, for the purpose of contributing towards the establishment of a school of design in that district. A preliminary meeting was held on Friday week, when various appropriate arrangements were made to forward the object in view.—The annual meeting of the Manchester school was held on Wednesday week, Mr. J. Brotherton, M.P., the president, in the chair, when the usual reports were read, and the meeting was addressed by various speakers. The report of the head master, Mr. J. A. Hammersley, states that there has been a slight increase in the number of pupils, an inconvenience to too small a staff of teachers.—A movement is being originated at Bradford in favour of the scheme for the establishment of elementary drawing and modelling schools for artisans.